

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1 through 7. (canceled)

8. (currently amended) A method for forming a propshaft assembly comprising:

forming a hollow shaft structure;

~~forming a first insert;~~

~~forming a second insert, the first and second inserts being non-identical; and~~

~~inserting the first and second inserts into the shaft structure in an axially spaced apart relation to one another.~~

determining a location of a pair of second bending mode anti-nodes along a length of the shaft structure;

locating a first insert within the shaft structure at a first one of the second bending mode anti-nodes; and

locating a second insert within the shaft structure at a second one of the second bending mode anti-nodes;

wherein each of the first and second inserts are each rotationally balanced and wherein the first and second inserts are non-identical.

9 & 10. (canceled)

11. (currently amended) The method of ~~Claim 10~~ Claim 8, wherein each of the first and second inserts has a length, a mass, a density and a resilience, and wherein at least one of the length, the mass, the density and the resilience of the first insert is different than that of the second insert.

12. (original) The method of Claim 11, wherein at least one of the first and second inserts is press-fit to the shaft structure.

13. (original) The method of Claim 12, wherein the first and second inserts are similar.

14. (original) The method of Claim 8, wherein the first and second inserts are similar.

15. (currently amended) A method for reducing vibration in a vehicle driveline comprising:

providing a shaft assembly with a shaft structure;

coupling the shaft structure to a power transmitting device, the power transmitting device including a pair of meshing gears;

transmitting rotary power between the shaft assembly and the power transmitting device, the meshing gears thereby generating gear mesh vibration that is transmitted to the shaft assembly;

determining a location of ~~a first bending anti-node and a second bending anti-node~~ a pair of second bending mode anti-nodes along a length of the shaft structure;

inserting a first insert at ~~the first bending anti-node~~ a first one of the second bending mode anti-nodes; and

inserting a second insert at ~~the second bending anti-node~~ a second one of the second bending anti-nodes, the first and second inserts being non-identical.

16. (original) The method of Claim 15, wherein each of the first and second inserts has a length, a mass, a density and a resilience, and wherein at least one of the length, the mass, the density and the resilience of the first insert is different than that of the second insert.

17. (original) The method of Claim 16, wherein at least one of the first and second inserts is press-fit to the shaft structure.

18. (original) The method of Claim 16, wherein the first and second inserts are similar.

19. (currently amended) A method for assembly a propshaft assembly comprising:
providing a shaft structure;
~~rotating the shaft structure to generate first and second bending anti-nodes;~~
~~determining the location of the first and second anti-nodes along the length of the shaft~~
~~structure;~~
positioning a first insert member at ~~the first anti-node position~~ a first position, the first
position being located at a first one of a pair of second bending mode anti-nodes; and
positioning a second insert member at ~~the second anti-node position~~ a second position, the
second position being located at a second one of a pair of second bending mode anti-nodes, said
first insert member being non-identical to the second insert member.

20. (previously added) The method of Claim 19 wherein each of the first and
second insert members has a length, a mass and a density, and wherein at least one of the length,
the mass and the density of the first insert member is different than that of the second insert
member.

21. (previously added) The method of Claim 19 wherein each of the first and
second insert members has an outer surface adapted to engage an inner surface of the shaft
structure.

22 & 23. (canceled)

24. (currently amended) A method for assembling a propshaft assembly comprising:
providing a hollow shaft;

causing the shaft to vibrate in response to receipt of an input of a predetermined frequency
so as to generate a pair of ~~first and~~ second bending mode anti-nodes in spaced relation along the
length of the shaft;

inserting a first insert member at a first position within the hollow shaft corresponding to ~~the~~
~~first anti-node~~ a first one of the second bending mode anti-nodes, the first insert member being
selected from a material adapted to attenuate vibration at the first ~~anti-node~~ position; and

inserting a second insert member at a second position within the hollow shaft
corresponding to ~~the second anti-node~~ a second one of the second bending mode anti-nodes, the
second insert member being selected from a material adapted to attenuate vibration at the second
~~anti-node~~ position.

25. (previously added) The method of Claim 24 wherein the first inset member is
made from a material having at least one of a length, a density or a mass characteristic that is
different than that of the material from which the second insert member is made.